



*Citation for published version:*

Brandling, J & House, W 2007, *Investigation into the feasibility of a social prescribing service in primary care: a pilot project*. University of Bath and Bath and North East Somerset NHS Primary Care Trust, Bath, U. K.

*Publication date:*  
2007

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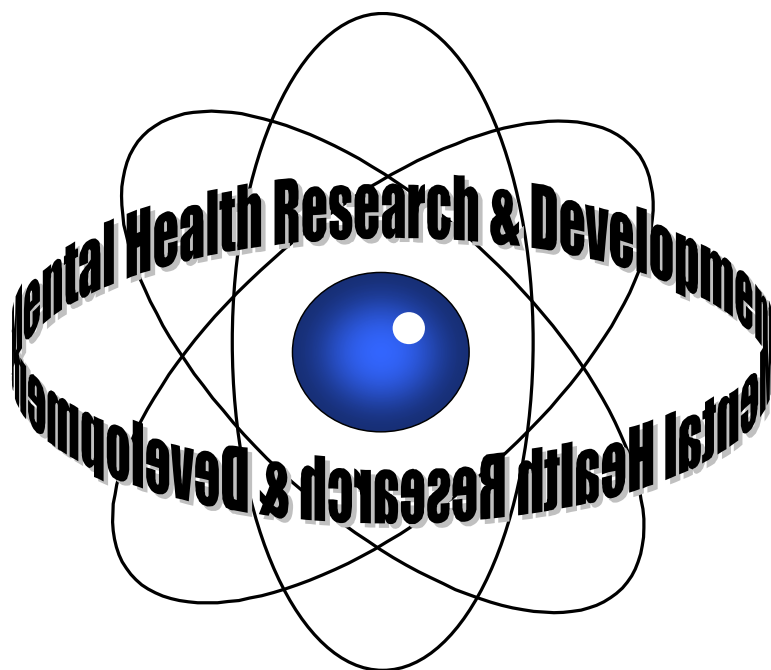
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## Investigation into the feasibility of a social prescribing service in primary care: a pilot project.



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## Introduction

Health service providers are keen to seek ways to provide alternative solutions to patients attending frequently with unexplained medical symptoms, psychological difficulties or social problems. Frequent attendees in primary care who consult five times more than the norm, are five times more likely to receive prescriptions and be referred to hospital. It remains unanswered whether this represents good primary care practice or is a poor use of resources (Heywood et al, 1998). Other patients consume above average secondary care resources without necessarily being frequent attendees in primary care and without a clear diagnosis of chronic disease. This creates a financial demand on services as well on appointment time. GPs have a limited amount of consultation time to discuss with patients any underlying issues that may be affecting their symptoms.

It is thought that poor mental health, family dysfunction and lack of social support can predict high primary care use (Bellon et al, 2008) and depressive symptoms predict frequent attendance (Dowrick, Bellon & Gomez 2000). Research to identify the people who tend to consult frequently suggests that there is a predominance of women and older people, those with chronic disease, emotional distress, some social problems and perhaps substance misuse (Gill & Sharpe, 1999, Heyward et al, 1998, Dowrick et al, 2000). Scaife et al, (2000) suggest social isolation and poverty are important environmental factors. A systematic review of the literature suggested there is little evidence of “malingering” or somatisation in this group (Gill & Sharpe, 1999). Health professionals will, however, recognise the sense of ‘heart sink’ that is experienced by practitioners when patients attend and all attempts to help are unsuccessful. It is often difficult for health professionals and patients to distinguish between somatic symptoms of biological disorders and the psychological and social difficulties patients endure (Heywood et al, 1998, Dowrick et al, 2005, Baez & Aiarzaguena, 1998).

Unresolved emotional and social problems are a significant factor in frequent attendance to primary care services (Heywood et al, 1998, Dowrick, Bellón & Gómez, 2000, Faulkner, 2002). Health professionals’ ability to go further than advise and diagnose and act as advocates as a response to social problems is limited (Popay et al, 2007a). They have limited knowledge of the gamut of services available in the national and local context. GPs often feel they do not know how to respond with practical help to the social problems their patients bring with them at consultation, often resorting to counsellors and psychological responses rather than practical services as they lack up to date information (Popay et al, 2007).

Research has suggested that bio-psychosocial models are required in general practice to accommodate the range of reasons patients consult their doctor (Baez & Aiarzaguena, 1998). Bellon et al (2008) describe a training and intervention method called “7 hypotheses and team”. This places the onus on the health professional to seek out the reason for frequent attendance, addressing any dysfunction in the doctor- patient relationship. This is reportedly successful in reducing the number of consultations. In terms of cost, training takes 15 hours, while preparing intervention took between 5-35 minutes.

The Third Sector or voluntary, community and social enterprise organisations (VCSES) often fill a gap in services provided by the statutory sector, where experiences, skill sharing and social networks can provide respite and solace for those not satisfied by mainstream channels. In addition community groups add value for communities and group members working to address local need. The Third Sector is reliant on human resources, usually volunteers, to meet need. This engagement can be beneficial to both volunteer and recipient (Faulkner & Davis, 2005). Benefits to the volunteer are thought to include enhancing dimensions of wellbeing including happiness, self esteem and satisfaction (Thoits & Hewitt, 2001, Borgonovi, 2008) and also countering depression, particularly in older adults (Musick & Wilson, 2002). Those willing to access social capital, in terms of social support, participation and trust have associated better self rated health status (Poortinga, 2006, Hyyppä & Maki, 2003). Social participation is related to lower psychological distress (Ellaway & Macintyre, 2007) and depression (Herrero & Gracia, 2007). To have a sense of community belonging can also be related to a sense of wellbeing (Herrero & Gracia, 2007). Projects have been previously established to direct patients to alternative services in health and also beyond to community, voluntary and enterprise sector (VCSES). Such VCSES organisations can provide social support, self help and alternative solutions. Although these projects fill a need and are well received there is little substantial evidence of the impact this makes on health service resources. Grant et al (2000) found that this kind of engagement could impact upon anxiety, general health and quality of life but did not reduce cost in the short term.

Social prescribing is a formal means of enabling primary care services to refer patients with social, emotional or practical needs to a range of local non-clinical services, and provides a framework for developing alternative responses to meet need. Recipients could include those who frequently attend, are high primary and secondary health care resource users, as well as those who are isolated, lack confidence and are disempowered in regard to

their own circumstances. It is a way of identifying where getting involved in Third Sector organisations could benefit the patient, the Third Sector organisation and the statutory services. It can also create links to provide social support mechanisms to enhance engagement process in prescribed health related activities, such a weight loss and exercise programmes (Martin & Woolf-May, 1999). Examples of people presenting in primary care that may be suitable for referral to a social prescribing facilitator can be seen in box 1.

1. *Steven is 26 and lives at his parent's house. He went to university straight after school but did not take the course seriously and left with a 2.2 in computer studies. He dabbled in drugs but never developed a serious habit as far as you know. He started his own computer business but this failed – he said because his customers didn't pay up. He hasn't had a job for more than a few weeks in the past 3 years. He has one male friend who lives in Wales. He has been slightly better since on anti-depressants but still spends much of his time in bed. Relationships at home are strained and both parents have stress related problems for which they attend the surgery. His father says he is very bright. He has seen a psychologist and a counsellor but neither was helpful.*
2. *Elizabeth is 51 and lives with her daughter (who is separated from her husband). Elizabeth herself has been divorced for many years. In the past she has had several episodes of depression and anxiety. She took an overdose 15 years ago (around the time of her own separation). She is a frequent attendee at the surgery. This is for a mixture of physical symptoms (mostly related to IBS, low back pain and thyroid disease) and anxiety symptoms (panic attacks) with prominent health anxiety. She has had numerous referrals to secondary care for consultations and diagnostics. Her daughter has revealed that she feels trapped at home by her mother.*
3. *Joyce is 84 and lives alone since the death of her husband in 2001. She has paroxysmal AF and cites this as the reason for not going out. She regularly asks for home visits for a variety of problems including UTIs, palpitations, abdominal pains. She talks so much it is difficult to get away. She has a son who lives in York and a daughter in Cornwall.*

Box 1. vignette examples of people presenting in primary care who may be suitable for social prescription

Social prescribing fits well with national and local agendas to improve health and reduce inequalities because it is: patient-centred; not just about what the NHS can do; it is a conduit for involving patients in their community and opening the channels between service sectors. It has been quite widely used with a range of positive outcomes including enhanced self-esteem; reduced low mood; opportunities for social contact; increased self-efficacy; transferable skills; greater confidence (Darbishire & Glenister, 1998, Fox, 2000, Grant et al, 2000, Huxley, 1997, Matarasso 1997, Mutrie 2000).

## Models of Social Prescribing

Bromley Primary Care Trust hosted a workshop in 2002 to examine models of social prescribing practice. Six models were defined as follows:

1. **Information service**-This is an information only service, with display boards and directory access. There is no face to face contact.
2. **Information and telephone line**- Leaflets and notice boards advertise the service, patients self initiate a telephone discussion with a worker. Again there is no face to face contact.
3. **Primary care referral**- Primary health care workers assess patients and refer to a social prescribing service. This is based upon an appointment leading onto non-clinical issues and is opportunistic.
4. **Practice based generic referral worker**- Clinics are held in general practice and patients can be referred by health workers or self refer. This may mean that there is a process of triage and signposting. The surgery can act as a "one stop shop".
5. **Practice based specialist referral worker**- As above the specialist worker works from primary care practices but may offer specific services such as Citizens Advice. Direct advice may then be offered as well as referral or signposting onwards.
6. **Non-primary care based**- Referrals from practice based staff are sent to a referral centre (Bromley User Group Outreach Centre). This could be an outreach service, set in the community, offering a one to one service. Other organisations also use this service and facilities.

## Key lessons learned from other projects

Bromley Primary Care Trust provided a record of the lessons learned and feedback regarding the most important aspects of social prescribing. Primarily, it is important to prioritise services where demand is high or resources are limited. Therefore this might include targeting areas of deprivation or vulnerable groups, such as asylum seekers and refugees; the high resource users of GP, A&E and secondary care services; and to avert crises. However they were clear that there should be equity of access to such services (2002). They also identified that developing the confidence of health professionals is a major challenge and that staff need to be sure that the process is clear and well defined, communication is good in both directions and that the service is flexible, monitored and evaluated. It was recognised that the Third Sector organisations are likely to have concerns about capacity to cope with referrals and that health organisations should make funding provision arrangements through service level agreements. The workshop group advocated use of a combination of models.

There remain, however, substantial knowledge gaps as to the practicality and cost-effectiveness of a social prescribing service within primary care. These include:

1. The willingness and ability of GPs to participate, and the structures required. The study by Grant demonstrated only 50% of expected referrals from GPs, but did not investigate the reasons for this (Grant et al, 2000).
2. Grant concluded that it costs more than the usual care offered by GP's (Grant et al, 2000). However, Goodhart & Graffy (2000) argue that this fails to take into account long term benefits to the community and reduction of the burden on all social support services. These studies were not focused on a population of high resource users.
3. The characteristics of people who might benefit from social prescribing. General characteristics of frequent attendees have been described in the literature and this needs to be made more specific in order to identify potential beneficiaries.

The proposal was for a pilot project to prepare the ground for the commissioning and establishment of a social prescription service and concurrent research project. This was achieved by carefully exploring the ways in which a social prescribing facilitator could interact with primary health care teams to achieve a higher uptake of the service, and by focusing on a population of high resource users the study planned to overcome the limitations of previous studies.

## Principal Research Question

What is the feasibility of developing a social prescribing service to reach a significant proportion of primary care high resource users who may benefit from a social intervention?

## Aims and Objectives

The aim of the study was to prepare for a multicentre randomised controlled trial (RCT) examining outcome and cost effectiveness for a new social prescribing service compared with usual care in patients making above average use of NHS resources. It was thought the RCT bid would be submitted to the Research for Patient Benefit funding scheme. As the project developed it became clear that this method of further research was not in the best interests of the patients, staff and stakeholders and that this would not provide a sustainable service. Therefore the overall aim of the project evolved to write a business case to present to service commissioners in order to instigate and sustain a social prescribing service in Keynsham. In addition, further monies would be sought to fund a concurrent research project to examine outcomes.

### Objectives:

1. Determine the prevalence of high resource users in three general practices serving Keynsham.
2. Explore the role of a social prescribing facilitator based in primary care, how the post-holder would integrate into existing structures including the general practices and the community and voluntary groups to which referral will be made.
3. Investigate other social prescribing schemes already in operation.
4. Establish a relationship with a health economist in preparation for recruitment to the proposed future study.
5. Develop a bid for funds via the Big Lottery and prepare a business case for presentation to the local Primary Care Trust.

## Method

Research governance was provided via the Pan Bath and Swindon Research Consortium and full ethical approval to proceed was given by Bath Research Ethics Committee.

Data was provided by semi structured interview data. There were three main sources of interview data, exploring the role of a social prescribing facilitator:

- Interviews with high resource using patients to explore the acceptability of a social prescribing service.
- Interviews with Keynsham general practitioners and practice staff exploring how a social prescribing service could integrate with existing services and reach a high proportion of suitable users.
- Interviews with other community stakeholders from the voluntary and statutory sectors.

|                        | Number Interviews |
|------------------------|-------------------|
| Patient                | 11                |
| Surgery Staff          | 8                 |
| Community Stakeholders | 2                 |

Identifying high resource users in each of the Keynsham surgeries was conducted in liaison with the practice staff. Frequent attendees were defined as those with a self-initiated consulting rate of 12 per year or more. This was to be assessed by interrogating the practice computer systems. The surgeries had different database systems for recording patient data. Initial searches in one surgery raised low numbers of self initiating frequent attendees (25 x 12 times or more per year) therefore this threshold was dropped to 8 visits per year. The two other surgeries could not identify patients by the number of visits they had attended and therefore could not supply data regarding the total number of self initiated frequent attendees. Therefore these surgeries could only identify frequent attendees by conducting a manual search to identify those that had self initiated. The surgeries managers asked staff to identify frequent attendees from memory but the small numbers identified after ruling out those with legitimate physical problems necessitating their attendance, again, did not suggest a representative prevalence. A further novel solution needed to be found and the surgeries felt they could conduct an audit of patients attending over the period of one week and share this data with the research team.

Data collection was supplemented in the following ways:

### 1. Audit prevalence of patients thought suitable for a referral to a social prescription service

Each of the surgeries conducted an audit of their own patients' attendance over the period of one week. They recorded those they thought were hypothetically suitable for referral to a social prescribing service. This was based upon a criteria guide for the types of problems patients might attend with. The documents used in this audit are shown in appendix c. One of the research team (WH) was later able to look back over the medical records of the patients identified at audit to look for common indicators identified at stage 3. Note that all GPs were asked to look out for suitable patients and 7 out of 23 doctors identified at least one patient.

|           | Total No. of consultations | No. of potentially suitable referrals | No. of GPs who found at least 1 patient; number asked to search |
|-----------|----------------------------|---------------------------------------|---|
| Surgery 1 | 644                        | 6 (0.9%)                              | 4:11  |
| Surgery 2 | 336                        | 3 (0.9%)                              | 2:7   |
| Surgery 3 | 387                        | 10 (2.6%)                             | 1:5   |

### 2. Audit records of high resource using patients ie frequent secondary care referral and frequent surgery attendance.

Surgery 1 was able to examine the records of patients who have had three or more secondary care referrals over the last year. The records were examined for common features that might constitute general indicators of suitability for social prescription that could be recognised in a consultation.



Surgery 3 was later able to identify the frequency of surgery attendance to see a doctor over the previous 12 months.

3. Semi-structured interviews with leaders of local voluntary and community groups to ascertain their views of engaging with a social prescribing service. This was provided by a student undertaking her masters degree in Health Psychology.

In addition to data collection, contact was made with a health economist- Dr Sandra Hollinghurst for discussions of developing a wider scale randomised control trial. This was not pursued after initial meetings, as the steering group were unhappy with the proposition of research through a randomised control trial (RCT) rather than service provision. This was because the parameters of an RCT would restrict the type of services being studied and also would be fixed term without any commitment to sustain a service.

The research team worked informally with the Care Forum to encourage the use its existing database (Room 102) and provide knowledge regarding community groups, activities etc. operating within the Keynsham area. The Care Forum team visited surgeries to show them how the Room 102 database worked and how licenses could be purchased.

Finally, the steering group have used the findings of this pilot project to develop a proposal for Big Lottery scheme but will also submit a business case to primary care commissioners, with a view to establishing a social prescribing service.

## Data analysis

Numerical data was subject to descriptive analysis only, presented in number and percentage form.

Qualitative data analysis was thematic. Thematic analysis is a method for identifying, analysing and reporting patterns within data (Braun & Clarke, 2006). The approach was inductive, in that themes emerged from the reports of the participants, as opposed to a pre-existing theoretical perspective. However it was influenced by the work of previous projects and studies.

Analysis followed a step-by-step approach, as follows:

1. Immersion in, and familiarisation with, the breadth and depth of the data.
2. Generation of initial features or codes of potential themes.
3. Analysis of codes and consideration of how they might combine into themes.
4. Review of themes for coherence and their representation of the data set.
5. Definition and refinement of themes.

## Project Outcomes

The outcomes of the study were based upon the study aims and objectives:

1. Estimations of the prevalence of high resource users in three general practices serving Keynsham.
2. Factors which influence the role of a social prescribing facilitator based in primary care. For instance, how the post-holder liaises and integrates into existing structures including the general practices and the community and voluntary groups to which referral will be made.
3. Findings from investigations into other social prescribing schemes that are in operation.
4. A relationship with a health economist.
5. Identification of factors influencing frequent attending patients.

## Study Setting

The project involved the three general practices providing primary care services to Keynsham. Additional stakeholders participated in the project steering and bid development, including representatives from Bath and North East Somerset housing, a community development worker and representative from the Care Forum.

## Results

Contact was made with a health economist to discuss the potential development of a randomised control trial of social prescribing in Keynsham. Discussions were held and although the idea was deemed to be workable, the limitations of such a controlled study defied the highly varied and organic nature of social prescribing work, including the underlying philosophical assumptions of the project, the type of intervention under study as well as the resource implications and limited sources of funding opportunities. The steering group suggested that alternative methods of evaluating/conducting research of a social prescribing project should be considered, as an RCT would not be the most suitable method. Action research and other qualitative methods were considered to be more appropriate. This had an impact on the overall outcomes of the project, which evolved into the following

- Design a social prescribing service based upon the finding of the study, literature and other projects experience
- Write a business case for the implementation of a social prescribing project in the local area
- Seek funding for implementing such a project, for example via practice based commissioners
- Design a suitable evaluation/research strategy in order to assess outcomes, increase project sustainability and disseminate best practice and evidence of success. This is illustrated by the Big Lottery bid and can be seen as a separate document.

### Similar services in the UK

#### *Signposting- North Staffordshire*

This project was situated within two general practices and was designed to promote mental health for all as well as reduce social exclusion faced by people experiencing mental distress (Blastock et al, 2005). It involves a recommendation of appropriate local services and resources rather than making a formal referral, given by primary care staff. Reception staff gave prompts to service users about the service, practitioners offered appointments when a need was identified and used a directory of services. Those with complex needs were signposted to PALS (Patient Advice & Liaison Service) or when a service could not be found in the directory, service users were signposted to a community facilitation service.

The service was evaluated by analysing the service user wellbeing assessment forms and by making contact with service users through postal questionnaires or telephone questionnaires. Telephone interviews were conducted with practice staff. Results were obtained from 12 people only but indicated that the offer of such a service was valued and a beneficial additional service. It was found to be a straightforward process but increased workload for the staff. The directory was comprehensive but not exhaustive. It was recommended that other projects should consider training staff who have contact with service users to conduct this kind of task, both in the process but also to familiarise them well with the available services. It was also acknowledged that there may not be an appropriate service for all service users.

#### *Stockport Arts on Prescription*

This is a project that has secured mainstream PCT funding and provides art activities for people with mild to moderate depression and/or anxiety. Its focus is to promote mental well-being but also prevent mental ill-health. It consists of a series of sessions introducing participants to drawing and painting after a referral from a mental health worker. The mental health worker also provides support and information to the group. Evaluation is conducted via a before and after questionnaire and suggests that service users report improved self concept, a reduction in the deterioration of mental health and some evidence of improvement. Participants also appear to use fewer resources and increase their engagement in social activities. <http://www.wlct.org/gmahn/socpres.pdf>

#### *Books on Prescription*

Many organisations are engaging in books on prescription. The premise is that through agreement with the local library service, GPs can advise patients to borrow recommended self help books from the library free of charge. Some services are limited to mental health areas but others include physical health advice also. For a selection of links to existing projects see appendix a.

### *Green Gyms*

BTCV (British Trust for Conservation Volunteers) is an organisation involved in environmental conservation volunteering and has developed a scheme to improve people's health and physical fitness as well tackling environmental concerns. Green gyms are run by trained volunteers and are already available in Bristol and Bath. They are held at least once a week, working on local projects such as community gardens and include warm up and cool down exercises. More information can be found at the following site

<http://www2.btcv.org.uk/display/greengym> BANES also support the use of green gyms  
<http://www.bathnes.gov.uk/BathNES/leisureandculture/fitness/greengyms.htm>

### *Social Prescribing in Bolton*

A formal framework has been devised so that health professionals can refer to non-clinical services to address social and emotional problems. There is capacity for self-referral, apart from the exercise referral programme. They have developed the SP Directory, which contains information on how to make a referral and listings of services. This was disseminated to GP surgeries and Health Centres. This was part funded with regeneration monies. Difficulties encountered were lack of time to commit to training and through changes to working practices. Monitoring has been conducted with evaluation planned for the future (Kahraman, 2005).

<http://www.bolton.nhs.uk/Services/socialprescribing/index.htm> THIS WEBSITE CANNOT BE FOUND

### *Social Prescribing in General Practice- Bradford South & West PCT*

This scheme was set up by the Community Health Advice Team (CHAT). Referrals to the CHAT worker are accepted by self-referral or from health professionals when non-clinical needs have been identified. The patient and CHAT worker discuss needs for up to 45 minute appointments and identify appropriate support in the community or voluntary sector. The CHAT worker can accompany the patient to the service. Services ranged from IT training, day centres and voluntary work. Evaluation was conducted by interviewing patients and staff and found that the service was valued, particularly as an individualised service and appeared accessible. Benefits included reduced isolation, increased confidence and levels of support as well as access to expert information. The CHAT worker was the key component to the service with good interpersonal skills and flexibility. It was thought to provide a good bridge between health and community services. (Woodall & South, 2006).

### *The Well Family Service*

This is a social support service in primary care for people exhibiting complex psycho-social problems. Early referral to the service is reputed to prevent development of more serious issues. It provides Family Support Co-ordinators who give advice, information and access to support services in surgeries and health centres. Referrals are direct from patients and health professionals. Evaluation seemed to indicate success in speed between referral and appointment, accessibility, and a variety of services that are less stigmatising than statutory sector provision. This led to reports of the prevention of crises or escalation, a sense of personal control over difficulties, reduced visits to GP and prescriptions and improved family relationships. Staff reported that the service filled a gap in expertise, was accessible and provided additional time to spend with the patient.

### *Lewisham Social Prescribing Project*

This project involved 6 surgeries and provided a directory of 50 voluntary services, with patient introduction forms. As a back up when patients displayed complex needs or could not be matched to the organisations within the directory appointments were made with a LSPP worker. Furthermore health professionals were encouraged to telephone LSPP to find appropriate referrals. This was used by patients too. Voluntary groups made presentations to surgeries about services but this was often logistically difficult. Recommendations from the project include placing the LSPP worker in the surgery, use an extensive referral information source and further evaluation of the usefulness of the referrals (White et al, 2002).

Lewisham social prescribing project directory can be found at the following site

<http://www.lewishampct.nhs.uk/lspdirectory/>

### *Communities on Prescription*

Cambridgeshire Council for Voluntary Services held a national conference to share experiences and examine how the primary care and the Third Sector are currently working together. They identified that practitioners face barriers in implementing and maintaining programmes through difficulties securing resources, providing good evidence, overcoming cultural and institutional barriers, and professional isolation (Edmonds, 2003). It was identified that a social model of health needs to be integrated with the predominant medical model and that there needs to be some common language and understanding of each others culture between the health and voluntary sectors. Models of partnership working can have a positive impact on whole communities as well as individuals and their treatments. "The voluntary sector can offer public trust, engagement with the marginalised, a service user focus, flexibility and an ability to innovate" (Edmonds 2003, p2). An example of a successful project was given, Ripon CVS

community care scheme. It was suggested that it was important for the service to be located in a GP practice to make it accessible, trusted and credible, but that the voluntary component brought experience of training and managing volunteers with its strong links to the community and other groups (Edmonds, 2003). Key issues for social prescribing are “the resource implications of increased referrals from primary care for voluntary organisations, ensuring joint ownership of schemes across the sectors, addressing cultural differences between the sectors, addressing differences in working practices and styles, and ensuring that everyone involved is clear about the purpose and value of the work.” (Edmonds, 2003, p2).

#### *Greenwich SPLASH*

Greenwich Teaching Primary Care Trust has established an online resource to identify non- medical services in the area. This novel resource has general categories such as volunteering opportunities, self help services and advice and support on healthy living, which are then broken down into more specific categories, identification of location and then the service available. The service details are provided including cost, opening times, location and a description of the service and service provider. The service is aimed at GPs and health professionals but referrals can be made by anyone using the referral forms on the site. Health professionals can also track the progress of patients. This service has been funded by the Neighbourhood Renewal Fund.

<http://www.greenwichsplash.org/mainframeset/index.html>

#### *Social Prescribing- Bromley, Penge*

The Bromley work has been long established and set out to improve the health and well being of patients, through (i) provision of short term support and facilitating access to local groups for non-clinical need (ii) to prevent ill health, (iii) assist in identifying and using care pathways and (iv) reduce GP demand with alternative referrals (Sowter & Stone, no date available). The pilot project operated within one GP practice and was reviewed by Suzie Sykes (2000). It was found that it effectively complemented primary care and bridged the gap between primary care and the voluntary sector. Health workers in the practice could refer to the social prescribing service and patients could also self refer, where non clinical circumstances impacted on health and well being. The referral usually resulted in signposting to services but for some this extended to liaison between the patient and the organisation to facilitate access or even attending on the first occasion with the patient. Outcomes were suggested to be increases in self esteem and confidence, reduced isolation and resolution of practical issues (Sowter & Stone).

### Interviews

#### *High resource user or patient participant interviews-*

Interviews were conducted with 11 people from the three surgeries. Five were male, six were female. Their ages were not recorded, although six were retired, two were not working due to health problems, one was known to be working, one status was unknown.

Results from the interviews with patients were variable. Although it was possible to recruit high resource users, during the interviews the reasons for their preferred use of the surgery became apparent. They disclosed multiple physical and psychological difficulties as well as general health anxieties. These patients had a strong connection to their doctor, expressing a trust or belief and they were the best person to address their difficulties. Some specified a particular doctor, whom they found sympathetic. Their accounts of illness were given as if to legitimise their frequent use of the primary care services, but they did not refer at all to being frequent attendees although all had been identified as attending 8 or more times per year. The researcher did not draw attention to this to avoid being seen as critical.

It seemed difficult for the patient participants to conceptualise a social prescribing service and they needed considerable description of what this might be in order to engage in discussion about this. However, this did mean that they were possibly swayed by the description given by the researcher, as if they should report a positive view on this type of service. Moreover, their insight was limited as it was an unknown concept. It was clear that a few of the patient participants were deeply embedded in the medical model as a solution for their complaints. The GP was considered the most appropriate source for treatment, advice and cure. Even though two of these participants had been told that no solution could be found, they continued to seek answers from their physician. Some could not see social prescription as a solution for themselves, but viewed it as appropriate for other lonely, isolated people and those who used the doctor's surgery a lot.

#### *Surgery staff and stakeholder interviews-*

Interviews were conducted with two stakeholders with interests in community and Third Sector development; four general practitioners, one other health professional and three practice staff. These participants had a more developed view of the needs of the service's high resource users and some had direct experience of using a local social prescribing service before. This led to a deeper insight into the benefits and barriers of establishing such a service.

The following themes were found in both the patient and stakeholder data

- Who needs social prescribing?
- Benefits of social prescribing
- Barriers to social prescribing
- Drawbacks of social prescribing
- Structuring a service
- Previous experience

#### Who needs social prescribing?

The patient participants were able to see that many people could benefit from a social prescribing facilitator. It could be because they were lonely or isolated and were using the surgery services to assuage these feelings or because they didn't know where else to go. Most often, however, they described this as suitable for others rather than themselves despite having been identified as frequent attendees. Stakeholders and staff participants were clear that this kind of service would definitely be helpful to people who are lonely and isolated, carers, those who have no diagnosis, unresolved problems, repeated ailments or are bereaved. They felt that this was a group of people whose needs are not fully addressed by the services the surgery provides, yet their compassion for these patients' circumstances meant they still wanted to provide a solution.

*"Because a lot of people who come along don't need medicines or doctors they just need a bit of love. And they get lonely and lost. So I understand social prescribing as fulfilling that aspect of care." (S04, line 12)*

It seemed that some staff understood that social factors have an impact on the physical and mental wellbeing of patients and the limitations of the medical model in this regard. Some wished to extend their advice into this realm. One stakeholder participant recognised that patients often adopt the language of medicine in order to see the doctor for help.

*"people .... choose to mould the presentation that they make to us, in terms of affecting the response to them, which is very often translated into physical if not psychological and emotional un-wellness." (S03, line 8)*

*"I think a lot of patients will come to you (the doctor) as their first port of call" (S10, line 66)*

#### Benefits of social prescribing

Although the patient participants had not necessarily considered any social prescribing types of services before, they could see the potential benefits. Of particular value was providing an alternative that was easily accessible, reducing the waiting time for a GP appointment and the option to have a longer appointment to discuss issues at a much deeper level. There was a desire for personalised support with a wide variety of issues, ranging from listening and counselling through to expertise about residential or nursing homes and community transport. The stakeholders also took this view and felt that social prescribing could be an additional service, among many.

*"it's part of a whole picture where somebody who needs support is able to be offered a whole range of services and interventions that might help them, rather than only being offered one intervention through the GP, which would be a medical one. So I think how I see social prescribing as a part of a move to let people who want some help or support find out exactly what it is that's going to benefit them most, rather than only being offered a bit of the picture." (S01 line 9)*

Social prescribing was seen as being a service where the whole gamut of information about community and voluntary groups could be found, a repository of knowledge. This would provide consistent, up-to-date information that would also be reliable and known to someone whose opinion they respected. It was also described as a source of social support where people could be directed to find comfort and meet like minded individuals. Those with an interest in the voluntary and community sector saw social prescribing as potentially beneficial to this Third Sector, enhancing tenuous links between health services and groups, reducing the mistrust between them and enabling people to access lay specialists. It appeared to be a natural extension of medical services into the social realm.

*"it is totally artificial this separation of medical response and the non-medical response as far as patients are concerned – people are concerned, service users are concerned – because they have distress and they express it" (S03, line 218)*

#### Barriers to delivering a social prescribing service

Currently the barriers to provision of social prescribing in the absence of a dedicated service is the lack of a comprehensive knowledge of local and national community and voluntary services and organisations. The patient participants did not always know where to go to find out information and saw the surgery as a central point for information and as a 'gatekeeper' to services. The surgeries reported they are given copious leaflets and posters for services, groups and organisations and need to sift the commercial from genuine support.

*"I think sometimes you can have too much, it's a bit of an overload, because it's also trying to pick out what's commercial and what is ,... people often wander in and leave leaflets on the side and we regularly have to go through them to collect what we can." (S05, line 88)*

They also have updates from the Primary Care Trust (PCT) and partners such as the local clergy. There appeared a need for either the patient or the GP to be proactive in seeking out alternatives to medical care and intervention. Despite there being a local organisation with a telephone helpline called "Purple Pages" and licensed database called "Room 102", many of the staff relied upon their memory and experience of organisations.

*".....I suppose it's just living in the area for years and years and years. And you know, for example, what's going on in local church halls and what's going on in leisure centres and stuff like that" (S07, line 190)*

While others relied on their colleagues and traditional sources for information:

*"I'd maybe probably ask the other partners here about whether they've heard of anything and then that would be about it or citizens advice ...would probably be the next port of call and yellow pages, you know it's that sort of random. (S10, line 118)*

Only one patient participant had used the local library regularly over the years as a source of information about the community as well for finding out facts.

Those of the patient participants who could envisage themselves using such a service, felt that making the initial move to join a new group or seek help from a new or unknown source would be a challenge. They knew from experience that it takes courage to move away from known support and the home. A social prescribing facilitator was seen as a link between themselves and the unknown, someone who could make that leap a little less daunting.

One stakeholder participant was extremely disheartened by the short term nature of projects providing new services such as social prescribing:

*"I have fairly negative views about setting things like this up, because they disappear. In my experience, there doesn't seem to be the will to keep that going .... I don't mean the will I mean the funding... the money disappears and it takes such a long time to get something like that going properly, that we all*

*get used to and we get used to referring to and then it disappears” (S07, line 68)*

### Drawbacks of social prescribing

There were few comments about negative aspects of social prescribing, most people generally thought it was a good idea and filled a niche. Resource limitations in the Third Sector could impact on the social prescribing service. This could be where demand outstrips the capacity of an organisation or limited or no further funding is available to support the needs of the group (See Constantine, 2007). Some patient participants felt they would contribute a nominal subscription or donation to participate in the activity they were referred to by the social prescribing facilitator but of course this would be dictated by their personal circumstances.

Some participants expressed concern about the confidence they could have in Third Sector groups, such as the standards they would uphold and the confidentiality that could be expected from such organisations in comparison to what they believed to exist within the NHS.

*“Some people might not be happy with social prescribing because they would worry that it wasn’t confidential, especially if it was a voluntary group. Confidentiality is probably a big issue” (P10, line 45)*

*“I’d want someone to have who was in that sort of field to have a look at them and say this is ok to be sending patients to rather than people just setting themselves up” (S10, line 95)*

### The structure of a social prescribing service

Most of the participants felt that the social prescribing service, should it be set up, would have to be held in health centres and surgeries. This would make it accessible but also give the service the credibility already afforded to health professionals. It would feel like a referral to an integral service rather than feeling as if the problem was not important enough for the doctor to deal with.

*“...they’re referred to (the social prescribing facilitator) by the GP or ... (the SP facilitator is) based within the practice but they aren’t actually referred ... but they’re there and available and they’re advertised as a sort of different service within the practice... it’s proved very beneficial where being referred rather than being signposted... [to] make it more official” (S01, line 232)*

However one staff participant did not feel this was the case and that there needed to be a culture shift, so that the responsibility for health and social engagement becomes the whole community’s business:

*“So a much more integrated into the society arrangement that maybe if people felt more belonged to them rather than being part of the medical services they’d be fighting more to keep these things going” “.... Well it unlocks that connection between the .. person who is low or lonely or whatever, and the doctor. There doesn’t need to be that connection and in fact that connection, in some ways is often damaging it’s why they become frequent attenders. The visit to the doctor replaces their social life.” “It’s much healthier if that’s handled within the community by the local people than it is ... than coming to the doctors to have this stamp of approval of your next manoeuvre...whether it would work or not I don’t know..... maybe frequent attenders have to have a stamp of approval on their next move...” (S07, line 81, 98 & 112)*

Patients felt that they would be happy for feedback to be given to GPs about their appointments with a social prescribing service, as this would inform their GP of their progress. Most stakeholders and staff also felt this would be right, although recognised that currently an informal recommendation is not usually followed up or fed back. There is a hope that the person has taken the advice and it has been successful or voted with their feet and just didn’t go along. There was a certain degree of trust that groups would be bona fide. A little concern was expressed about the groups people might become involved in and that they should be monitored and given some official seal of approval “a kite mark or something” (S10). Others felt that they would get informal and formal feedback from

patients about the service and they simply would not attend again if they could not see the benefit of being involved.

#### Previous experience of a social prescribing service

Stakeholders with prior experience of a social prescription style of service were most insightful about its benefits and barriers. Some recollected patients who had been helped and where the impact had been clear. The person who has occupied the role clearly commanded considerable respect and reverence. They greatly appreciated the service and spoke very highly of the person who carried out the role. She was described as very charismatic, a person who could operate at different levels, was not put off by structural barriers and was keen to adapt to the needs of the people she saw. She had not been a health professional but was charismatic and proactive, quick to make use of opportunities and able to communicate with people from all backgrounds and disciplines. With these qualities in mind, participants felt this needed to be recreated, that the social prescribing facilitator did not need a health qualification but a sound knowledge of the health and Third Sector systems. Someone with highly developed interpersonal, communication and networking skills, with a motivating and inspiring manner to encourage clients to make brave decisions or take up new opportunities. The role that a social prescribing facilitator would occupy would be as a link between health professionals and the Third Sector. They would formalise the non-medical approach and raise the profile of the service, liaising with Third Sector groups and their volunteers. They would also be able to develop relationships and make assessments of need for those people referred to the service. They would also be able to keep up-to-date with local groups and activities, providing signposting for staff as well as referrals for patients.

This previous person was one part of the Amalthea project (Grant et al 2000). Anecdotal evidence suggested that the early development of this project was extremely organic, developing according to need; starting a library of information, progressing to facilitating this information and developing into group formation and responding to the community's need. However, it was reported that as the need to provide evidence of impact became a driver, the project became weighed down with bureaucracy. Funding was not renewed and this valued service ceased.

#### Auditing health records

Surgery 1 was able to examine the records of patients who have had three or more secondary care referrals for out patient appointments or diagnostic procedures over the last year. This was made possible by creating a list of all such referrals on a spreadsheet programme separate from the main patient database (EMIS). One hundred and sixty eight of patients were found in a practice size of 9,600. This represents 1.75% of the total practice list. The health records of a sample of this number (N40) were examined by the GP/ lead investigator to ascertain the hypothetical suitability of this group for social prescription referral. Fifty per cent (N20) of this sample were deemed suitable for referral. This group were screened for age (range 21-86, mean age 59) and gender (19 female, one male). Raw data can be seen in appendix d. Extrapolating this percentage means that there is a hypothetical group of 80 persons in one practice, who are high secondary care resource users and might be suitable for referral to a social prescription service.

A sample of these health records was also examined for common features that might constitute general indicators of suitability for social prescription that could be recognised in a consultation. These were rated as strong, medium and weak, based on their presentation frequency and are shown in box 1.



Box 1. Features of patients suitable for social prescription (from patients who have 3+ hospital referrals in past 12 months):

**Strong indicators:**

- Vague or unexplained symptoms or inconclusive diagnoses including IBS, fibromyalgia, recurrent/ chronic pain
- Frequent attendance to surgery for GP appointments: eight or more per year
- Poor social support mechanisms, loneliness or a carer
- Many symptoms affecting multiple systems
- Psychological difficulties e.g. low self esteem, past history of mental health problems, history of abuse, alcohol/ drug misuse/ dependence, body image problems

**Medium indicators:**

- Somatic preoccupation
- Dissatisfaction with results, referral or discharge from secondary care
- Poor results with mainstream treatments
- Recurrent re-evaluation and revision of prescriptions due to lack of effect or side effects

**Weak indicators:**

- Several chronic illnesses (2+)
- Repeated visits to A&E or out of hours service (3+ in 12 months)
- Obsessional personality

The same surgery was also able to examine the number of patients in the practice with a mental health diagnosis since this is designated a strong indicator for GP selection for social prescribing and is noted in the literature. Three database searches were conducted using different criteria and the results are found below in box 2.

Box 2. Surgery 1- mental health diagnosis in practice list

Search 1: all mental disorders ever recorded aged 18-100:

**total 1743 (18%)** [female 956 20%; male 798 16%]

Note: this includes learning disability, severe psychotic illness and personality disorder.

Search 2: mental disorders excluding learning disability and psychosis ever recorded:

**total 844 (9%)** [female 456 9%; male 388 8%]

Note: includes alcohol problems and drug misuse.

Search 3: as for search 2, but recorded only in the past 10 years:

**total 395 (4%)** [female 223 5%; male 172 4%]

Surgery 3 was later able to rank their patient list by frequency of attendance (by using a piece of additional software in conjunction with their main patient database ('Front Desk' combined with 'Synergy'). The data is shown in Table 3.

Table 3 Frequently attending patients at Surgery 3 (total patient list 6782)

| Doctor attendances in past 12 months      | 8-11      | 12 or more |
|---|-----------|------------|
| Number of patients (% of total list size) | 462 (6.8) | 349 (5.1)  |

All three participating surgeries conducted an audit of the number of patients attending over the period of one week, who might be suitable as potential referrals to a putative social prescribing service. There was an uneven engagement of practitioners in this task despite personal approach from members of the research team. A minority (7 of 23) of practitioners identified one or more potential patients.

The identified patients' records were subsequently examined for the presence of the social prescription indicators identified from the cohort of surgery 1. Indicators were derived from patients who were frequently referred to secondary care (3+ per year) and thought to be suitable for social prescribing, see box 1. Although the number of patients identified during the audit was very small, it was clear that patients identified by different practitioners in all three surgeries also had a high frequency of the same indicators. Table 4 shows how often the indicators occurred in their health records. The raw data can be viewed in appendix C. A large majority had suffered mental health problems at some time in the past (17 of 19: 89%) Thirteen of the 19 patients (68%) had attended eight or more times in the past year and seven (37%) 12 or more times. The mean attendance rate of 14 times per year is weighted by surgery 3's mean attendance rate, much higher than the other surgeries. Both frequent attendance and previous mental health problems were rated as strong indicators in the 3+ referrals group. There was also a high prevalence of two or more chronic illnesses in the surgery attendance cohort (11 of 19: 58%). This was identified as a weak indicator amongst the 3+ referrals group. However, clearly a group of patients identified through attendance at the surgery will have an over-representation of frequent attendees and of patients with several chronic diseases compared with the practice list, regardless of other characteristics. This could be further elucidated by collecting data from a random sample of patients attending GP appointments but this was beyond the resources of the project.

This group did not contain many patients with 3 or more secondary care referrals and these may therefore be an additional subgroup that contains within it a high proportion of patients with social referral indicators who are not necessarily frequent attendees at the surgery and hence were unlikely to be identified during the one week audit. It is also the case that individuals being picked up by GPs are not identified by a systematic decision based on indicators but more on the disclosures made at consultation, the GPs prior knowledge of the patient and the doctors' beliefs about social models of health and illness.

Table 4 incidence of indicators for social prescribing suitability

|                                     | Surgery 1 (6 patients) | Surgery 2 (3 patients) | Surgery 3 (10 patients) |
|-------------------------------------|------------------------|------------------------|-------------------------|
| Strong indicators                   | 18                     | 6                      | 29                      |
| Medium indicators                   | 5                      | 2                      | 2                       |
| Weak indicators                     | 3                      | 5                      | 8                       |
| Range frequent attendance number pa | 4-10                   | 4-7                    | 5-44                    |
| Mean attendance rate                | 7.2                    | 5.7                    | 20.6                    |
| Age range in years                  | 33-77                  | 54-88                  | 19-78                   |
| Gender                              | 2 Male<br>3 Female     | 3 Male                 | 1 Male<br>9 Female      |

## **Supplementary research into Third Sector group understanding of social prescribing**

This information was provided by a student (Constantine, 2007) undertaking her dissertation in completion of a master's degree in health psychology. She was placed within the MHRDU (Mental Health Research & Development Unit) and contributed to the project development as well as conducting her own work. The research examined social support through social prescribing and the attitudes of leaders of voluntary organisations. She conducted a thematic analysis to establish how social support occurs and its importance within voluntary organisations, according to the leaders of these organisations. She also determined those issues which are important to leaders of voluntary organisations in terms of social prescribing. The verbatim outcomes from her research are shown below and confirm previous opinion (Edmonds, 2003).

- In line with previous research, social prescribing schemes should be user-led. Patients and voluntary organisations should be asked at the planning stage what form they wish the prescribing to take.
- Referrers should be made aware of the need to build relationships between themselves and leaders of voluntary organisations. They should definitely establish a form of contact and if possible they should visit groups and see them in action. It is recognised that this will increase the workload when a social prescribing scheme is set up but this should have rewards and contribute to the success of a scheme.
- Referrers should be made aware that the interactions during a referral have a strong contributing effect on whether patients engage with the service offered. Training for the referrer in terms of increasing awareness of the importance of engaging with the patient, working together to find an appropriate group and being aware of possible concerns held by the patient, would be beneficial.
- Concerns expressed by leaders of voluntary organisations with regard to funding and sustainability will affect whether they wish to be involved with a social prescribing scheme. Both primary care and voluntary organisation sectors must work together from the beginning of a scheme in order to establish how funding and sustainability can be managed.

Recommendations were that future research into social prescribing must bear in mind the views and attitudes of members of voluntary organisations. The views of a variety of such members might indicate whether people accept that they visit groups for social support, how they hope that support is offered to them and the degree of social support that they feel. It would be interesting to note if they would really like more people to join the group through social prescribing. The diverse structure and function of the voluntary sector may influence the type of responses obtained. It would therefore be interesting to separate groups by size and by the service they provide, to determine whether responses about social support through social prescribing can be clustered differently according to the role of organisations and their structure.

These findings should be considered when planning and implementing a social prescribing scheme and future research must be conducted with a variety of members of voluntary organisations in order to establish if these results can be generalised to cover all voluntary organisations.

## Discussion

It is clear that much is already known about social prescribing and that various projects have already been established in the UK. There are already definitions of the types or models of service that are provided as well as discussions about barriers and partnership working provided by the Bromley and Cambridgeshire Council for Voluntary Services projects.

Key issues for social prescribing are

- resource implications of increased referrals from primary care for voluntary organisations
- ensuring joint ownership of schemes across the sectors,
- addressing cultural differences between the sectors,
- addressing differences in working practices and styles,
- ensuring that everyone involved is clear about the purpose and value of the work (Edmonds, 2003, p2).
- prioritising services where need is identified, for instance high resource users
- equitable access
- developing the confidence of local practitioners in the service
- flexibility
- service evaluation

This research project was designed to supplement this knowledge with local information in order to present a business case to commissioners and establish a social prescribing service in the locality.

Therefore this project was carried out in several stages to examine the feasibility of a social prescribing service in primary care services for Keynsham. Qualitative data were collected through semi structured interviews. This was supplemented in three ways:

1. Interviews with Third sector organisation leaders, conducted by a student in completion of masters degree (Constantine, 2007)
2. Audit of high secondary care resource users in one surgery by a principle GP
3. Audit of consultations for potential referrals to a social prescribing service in three surgeries by GPs and surgery staff.

The thematic analysis generated the following common themes in the accounts of patient, staff and stakeholder accounts

- Who needs social prescribing?
- Benefits of social prescribing
- Barriers to social prescribing
- Drawbacks of social prescribing
- Structuring a social prescribing service
- Previous experience

These themes provide a practical understanding of social prescribing as it was perceived by the participants. Despite some reservations about sustaining the service beyond the boundaries of a research project, it was clear that the participants in this study would be keen to see a social prescribing service established. This was in order to provide social intervention where medical intervention is inappropriate or where it has already been exhausted. It was difficult for patient participants to achieve any deeper insight, than being able to see how it could be helpful as it was a new concept to them. Some could relate it to their own experiences of using the Third Sector or community groups in the past. Similar to previous studies (Heywood et al, 1998, Hodgeson et al, 2005), this group of patient participants did not present their frequent attendance as problematic, rather it was a necessity. Furthermore, none overtly recognised that they had been identified as frequent attendees. Staff and stakeholder participants had a deeper insight and were able to consider the wider ranging impact of social prescribing on individuals, community groups and the wider community. This was especially the case for those with previous experience of such a service.

The potential impact on the Third sector was considered by few participants. Some needed some reassurance about the capacity and confidentiality of organisations, an increased professionalisation. The VCSES themselves were keen to be involved in the development of social prescribing from the outset to ensure good working relationships, to manage capacity and funding issues as well as training to deal with the needs of those referred (Constantine, 2007).

There is a focus in the literature on frequently attending patients which is related to the cost implications for the practices involved and more generally for the NHS. However, there is little convincing evidence of reduced frequency with which these patients attend and the demand they make on services and resources within the time scales of the studies (Grant et al, 2000). Goodhart and Graffy (2000) suggest that expecting changes in consultation patterns within the periods of research projects is too short term a view and that it is the effect on communities and entrenched deprivation that can be affected in the longer term. Evaluation of the expert patients programme (2007) indicated that individuals have habitual patterns of consulting health professionals and this might be similar here. The authors (Kennedy et al, 2007) go on to say that people with unsatisfactory relationships with the health professionals or service providers were more likely to change behaviours because of the expert patient intervention. Moreover, some people used alternative services because they felt that the traditional sources of health support had been exhausted. In the short term patients did not consult less but did have improved quality of life measures, increased energy and self efficacy. Using a social prescribing service may in fact produce similar results to the expert patient programme, by benefiting those who wish to be more self efficacious and take responsibility for their own health improvement (Kennedy et al, 2007).

The frequently attending patient participants in this study were clearly embedded in the 'medical model', they legitimised their use of the surgery with an illness framework. It is clear that these patient participants had an underlying belief in their doctor's authority to provide solutions to their health problems, regardless of their manifestation. They required their doctor to be a repository for knowledge and cures even when there did not appear to be any. These participants are therefore not wholly representative of the surgery population as a whole, and may be least likely to change their patterns of consultation and may be found to be difficult to engage in a social prescription service. In future studies it would perhaps be most illuminating to ask infrequent or regular users rather than frequent users, to provide insight into the alternatives and thoughts of people who already use other options.

Health records searches for numbers of people using practices very frequently as well as being referred to secondary care services for consultations and diagnostic appointments could not be undertaken in all practices. This was mainly due to the limitations of the database systems and the ways in which the practices recorded data. The number of patients identified by GPs during surgeries as potentially suitable for referral to a putative social prescribing service were also low. However, it should not be forgotten that this is only a snap shot of one week, from a few doctors who engaged in the research. It did not extend to other health professionals. Part of the essence and strength of the general practice consultation is an intense engagement with the patient as they present in the room at that time. Other broader agendas tend to be displaced by this personal interaction. This is particularly so for patients with complex emotional and mental health problems – some of the very ones who might often be suitable for social solutions. Therefore raising new issues or perspectives may not be possible in the time allotted. Additionally, many organisations have their own agendas to which they would like the Primary Healthcare Team to attend – not least the government. Consultations are crowded with agendas! There is also individual variability between health professionals. They will engage with patients differently and also see the level of responsibility they have for patient wellbeing stretching into the social realm in a variable way. It was clear from the outset that the health professional participants felt some of the patients who consulted them could not have their problems solved by medical means. This may well be the very reason they agreed to take part in this study, whereas other doctors who did not engage have other beliefs around the medical model. These participants thought that some kind of social intervention would be appropriate, but they described barriers preventing them from providing this help. Doubt about credibility and accountability as well as a lack of knowledge was mooted. Those health professionals, embedded in the geographic area of their work, had an advantage with local knowledge over those who travel into the area. However, consistent with Grant et al (2000) GP engagement in this arena remains a difficulty. Doctors and other health professionals would appear to feel a commitment to continuing to see patients, regardless of their ability to provide relief. Indeed, one participant remarked that she would continue to go through the motions of appointments, to maintain her relationship with the patients, because one day there really would be something wrong and the trusting relationship needed to be maintained. The question remains whether health professionals who doggedly persist in seeing frequent attendees without referring beyond the health services may inadvertently discourage the patient from moving on.

By placing emphasis on the health professional rather than the patient, Hodgeson et al (2005) suggest that general practitioners should acknowledge the uniqueness and ongoing distress of the frequently attending patient to allay any sense of blame by using reassurance and explanations. However, Neal et al (2000) suggest this approach only has fleeting benefit on health anxiety and can act to encourage a dependent relationship between the doctor and patient. Bellon et al (2008) have designed an intervention technique to address the multiple reasons why some people frequently attend. This approach retains the 'problem' within the health services with

the expectation that primary care will solve it somehow. Offering a solution outside of the health realm may break any cycle of patient passivity and dependence as well as removing elements of health professional paternalism.

Identifying patients who are potentially suitable for referral to a social prescribing service (should one be commissioned) and flagging their records prior to attendance with a screen note could act as an 'aide memoir' so the health professional can broach discussion with the patient if desired. This is likely to help trigger the shift in the professional's mind toward social solutions. The ability of practices to achieve this is variable because of differences in the computer systems used. For instance, currently, surgeries 1 and 2 in Keynsham are unable to retrieve a list of patients who are frequent surgery attenders. However, despite the current limitations it would be possible to identify and flag patient records for a previous history of mental illness and for certain 'vague' diagnoses, both identified as strong indicators for social prescribing. Being able to understand patients' use of surgery services is seen as a priority for development and the Primary Care Trust is expecting to provide new software packages that will improve data analysis in the near future.

It is clear that this study confirmed and expanded the findings of previous research in identifying the characteristics of people who are high resource users. It was already known that there is a predominance of women and older people, people with chronic disease, those who show signs of emotional distress, have some social problems and perhaps substance misuse (Gill & Sharpe, 1999, Heyward et al, 1998, Dowrick et al, 2000). Characteristics have been identified and ranked and this could now be used, in principle, to identify persons suitable for referral to a social prescribing service. This will help to overcome the initial hurdle of recognition for the health professional.

The person required to carry out social prescribing needs to have an understanding of political issues such as health inequalities and hard to reach groups in order to work with diverse individuals who lack personal resources and to empower the disenfranchised members of communities. It is not considered a benefit for the person to come from a health background. Partnership between the health and voluntary sector would appear to be of particular importance. It would seem that the post could fit well with existing lay models of public health trainers and community activators. These posts are just about to be launched in the area and together could demonstrate a network of provision from lay to specialist worker, working at an individual health behaviour level as well as being influential at a community level.

Frequent attendance can be connoted pejoratively, with links made to malingering and resource inefficiency. This terminology must therefore be used carefully in order not to alienate or misrepresent the service users and their experiences. However, frequent attendance and high resource use does continue to present fiscal challenges to health service provision. Although, in the short term, social prescription has not been shown to have an impact on consultation frequency (Grant et al, 2000, Goodhart and Graffy, 2000), it has been shown to have an effect on quality of life (Grant et al, 2000). It is this longer term impact of social prescription that can indirectly effect the use of health resources by creating active rather than passive citizens. By engaging with the THIRD SECTOR it is possible there will be a longer term impact on social capital and community cohesion. Further work needs to be undertaken to measure the impact of strengthening links between health services and the VCSES. Goodhart and Graffy (2000) posit costs need to be shared between social and healthcare organisations as social prescribing has a wide ranging potential benefits. The moral obligation to support people reaching out for help to health professionals was summed up by one of the participants as follows:

*"Society, as a whole, needs to ask the question; do we really care whether people suffer misery and if we do are we willing to do something about it and if we are, are we willing to put our money where our mouth is?" (S07, Line 433)*

## Recommendations

1. Remove focus from immediate aim to reduce frequent attendance and secondary care referral, consider this a long term goal
2. Place focus on developing strong links with Third Sector, community and voluntary organisations, so that health services indirectly reach into the social realm
3. Provide up-to-date factual information for all parties regarding opportunities and make use of existing local database (Room 102) and telephone helpline (Purple Pages) rather than re-inventing a resource.
4. Develop ways of identifying patients who have the potential to benefit from a referral to social prescribing services, using the indicators described and mark health records so at their next appointment this can be offered.
5. Choose a service model based on the Bromley definitions to fit local need, for example, a practice-based specialist referral worker.
6. Work in partnership with existing services such as health trainers and community activators (Public health initiatives).
7. Pursue funding opportunities tenaciously by building a business case for a social prescribing service to present to local service commissioners.
8. Examine patient outcomes through the use of social prescribing services.

## References

- Baez, K., Aiarzaguena, J. M. 1998 "Understanding patient-initiated frequent attendance in primary care: a case control study." *British Journal of General Practice* 48 (437): 1824-1827
- Blastock, D. Brannelly, T. Davis, A. & Howes, D. **2005** *Signposting Evaluation Report* Suresearch, NIMHE West Midlands & University of Birmingham
- Bellon, J.A. Rodruguez-Bayon, A. de Dios Luna, J. & Torres-Gonzalez, F. **2008** Sucessful GP intervention with frequent attenders in primary care: randomised contro trial, *British Journal of General Practice*, May.
- Borgonovi, F. **2008**, Doing well by doing good, the relationship between formal volunteering and self reported health and happiness, *Social Science and Medicine*, 66, 2321-2334.
- Braun V., Clarke V., **2006**, Using thematic analysis in Psychology, *Qualitative research in Psychology*, 3(2), 77-101
- Bromley Primary Care Trust Workshop Report- Social Prescribing: making it happen in Bromley **2002**
- Constantine, R., **2007**, Social support through social prescribing:the attitude of leaders of voluntary organisations:a thematic analysis, MSc Helath Psychology dissertation, Univeraity of Bath
- Darbishire L, Glenister D, **1998**, *The Balance of Life scheme: mental health benefits of GP recommended exercise in relation to depression and anxiety*, Essex.
- Dowrick C.F., Bellón J.A., Gómez MJ, **2000**, GP frequent attendance in Liverpool and Granada: the impact of depressive symptoms *British Journal of General Practice* May; 50(454): 361–365.
- Edmonds, N. **2003**, Communities on Prescription? Primary care and the voluntary sector working together in practice, *Journal of Mental Health Promotion*, [http://findarticles.com/p/articles/mi\\_qa4122/is\\_200312/aj\\_n9303285](http://findarticles.com/p/articles/mi_qa4122/is_200312/aj_n9303285) viewed 02/07/08.
- Ellaway, A. & Macintyre, S. **2007**, Is social participation associated with cardiovascular disease risk factors? *Social Science & Medicine*, 64, (7), 1384-1391.
- Faulkner, M. **2002**, Supporting the psycho-social needs of patients in general practice: the role of a voluntary referral service, *Patient Education & Counselling*, 52, 41-46
- Faulkner, M. and S. Davies **2005** Social support in the healthcare setting: the role of volunteers. *Health & Social Care in the Community* 13(1): 38-45.
- Fox K, **2000** Self esteem, self perceptions and exercise *International Journal of Sport Psychology*; 31:228-240
- Gill, D. & Sharpe, M. **1999**, Frequent consulters in general practice: A systematic review of studies of prevalence, associations and outcome, *Journal of Psychosomatic Research*, 47, (2), 115-130.
- Goodhart C, Graffy J, **2000** Long term benefits need to be taken into account when evaluating family support projects *British Medical Journal*; 320: 1600
- Grant C, Goodenough T, Harvey I, Hine C, **2000** A randomised controlled trial and economic evaluation of a referrals facilitator between primary care and the voluntary sector *British Medical Journal*; 320:419-23
- Greater Manchester Arts & Health Network **2005** [www.wlct.org/gmahn/socpres.pdf](http://www.wlct.org/gmahn/socpres.pdf) viewed 21/09/07
- Herrero, J. & Gracia, E. **2007**. Measuring perceived community support: Factorial structure, longitudinal invariance, and predictive validity of the PCSQ (Perceived Community Support Questionnaire). *Journal of Community Psychology*, 35, (2), 197-217.



- Heywood P.L, Blackie G.C, Cameron, I.H, and Dowell, A.C. **1998**, An assessment of the Attributes of Frequent Attenders to General Practice, *Family Practice*;15(3):198-204.
- Hodgeson, P. Smith, P. Brown, T. & Dowrick, C. **2005** Stories of frequent attenders: A qualitative study from primary care, *Annals of family medicine*, 3 (4) 318-323.
- Huxley PH, **1997** *Arts on prescription* Stockport: Stockport NHS Trust
- Hyypä, M. T. Maki, J. 2003 "Social participation and health in a community rich in stock of social capital." *Health Education Research* 18 (6): 770-779
- Kahraman, L. **2005** *Social Prescribing in Bolton*
- Kennedy, A. Reeves, D. Bower, D. Lee, V. Middleton, E. Richardson, G. Gardner, C. Gately, C. & Rogers, A. **2007** The effectiveness and cost effectiveness of a national lay led self care support programme for patients with long term conditions: a pragmatic randomised control trial. *Journal of Epidemiology and Community Health*, 61: 254-261.
- Martin, C. and Woolf-May K., 1999 The retrospective evaluation of a general practitioner exercise prescription programme. *Journal of Human Nutrition and Dietetics* 12, 32-42
- Matarasso F, **1997** *Use or Ornament? – The Social Impact of Participation in the Arts*. Comedia.
- Musick M.A. and Wilson J., 2002 Volunteering and depression: the role of psychological and social resources in different age groups. *Social Science and Medicine* 56, 259-269
- Mutrie N, **2000** The relationship between physical activity and clinically defined depression *Physical activity and psychological well-being* SJH Biddle, KR Fox and SH Boutcher (eds) London: Routledge
- Neal, R.D., Heywood, P.L. and Morley, S. (2000) "I always seem to be there" - a qualitative study of frequent attenders. *British Journal of General Practice*, 50, 716-723.
- Poortinga, W., 2006, Social capital: an individual or collective resources for health. *Social Science and Medicine*, 62(2) 292-302 2006
- Popay, J. Kowarzik, U. Mallinson, S. Mackian, S. & Barker, J. **2007** Social problems, primary care and pathways to help and support: addressing health inequalities at the individual level. Part 1: the GP perspective, *J. Epidemiol. Community Health*, 61, 966-971
- Popay, J. Kowarzik, U. Mallinson, S. Mackian, S. & Barker, J. **2007a** Social problems, primary care and pathways to help and support: addressing health inequalities at the individual level. Part 2: the lay perspective, *J. Epidemiol. Community Health*, 61, 972-977
- Scaife, B., Gill, P. S., Heywood, P. L. and Neal, R. D. (2000) Social-economic characteristics of adult frequent attenders in general practice: secondary analysis of data. *Family Practice*, 17 (4) 298-304.
- Sowter, T. & Stone, C. *Exploring Opportunities, Social Prescribing in Bromley*, Bromley Primary Care Trust
- Sykes, S. **2000** *A Study of the social prescribing scheme at the Park Practice Penge*, Dissertation, Faculty of Health & Community Studies, De Montford University.
- Thoits, P.A. & Hewitt L.N. **2001** Volunteer Work and Well-Being *Journal of Health and Social Behavior*, 42, 2, 115-131.
- White, C. Glover, A. & O'Brien, A. **2002** *Summary report on LSPP Pilot*
- Woodall, J. & South, J. **2006** Social prescribing in general practice: the CHAT evaluation in Bradford South & west PCT, *Centre for Health Promotion Research Newsletter* 36, Leeds Metropolitan University, Faculty of Health.

## Appendix a

London Borough of Merton (<http://www.merton.gov.uk/learning/libraries/library-facilities/booksonprescription.htm>)

Portsmouth City PCT & Portsmouth City Council  
(<http://www.portspct.nhs.uk/upload/public/attachments/17/GPLleaflet.pdf>)

Cambridge City, South Cambridgeshire PCT's and Cambridgeshire County Council  
([http://www.cambridgeshire.gov.uk/NR/rdonlyres/B028DBEB-218A-46E1-8C8F-22DBDC9618D9/0/bop\\_booklet.pdf](http://www.cambridgeshire.gov.uk/NR/rdonlyres/B028DBEB-218A-46E1-8C8F-22DBDC9618D9/0/bop_booklet.pdf))

Gloucestershire County Council and PCT's  
(<http://www.gloucestershire.gov.uk/libraries/index.cfm?articleid=10051>)

Northamptonshire County Council & Daventry with South Northants and Northampton, and Heartlands PCT's  
(<http://www.northamptonshire.gov.uk/Leisure/Libraries/Reading/bookpres.htm>)

Cheshire County Council with Western Cheshire Primary Care Trust, Central and Eastern Cheshire Primary Care Trust and Cheshire and Wirral Partnership Trust.  
([http://www.cheshire.gov.uk/Library/books\\_prescription.htm](http://www.cheshire.gov.uk/Library/books_prescription.htm))

Knowsley Metropolitan Borough Council  
([http://www.knowsley.gov.uk/health/health\\_medical\\_care/book\\_prescription.html](http://www.knowsley.gov.uk/health/health_medical_care/book_prescription.html))

Plymouth City Council  
(<http://www.plymouth.gov.uk/homepage/leisureandtourism/libraries/librarygateway/adviceandguidance/bookprescriptionscheme.htm>)

There are an increasing number of these services that can also be found through internet searches.

## Appendix b

### Which patients could benefit from referral to a social prescribing service? An audit of prevalence within primary care in Keynsham

#### What are we trying to do?

We want to estimate the prevalence of patients attending your surgery who might be suitable for a social prescribing service.

#### What is social prescribing?

Social prescribing is a term used to describe formal and informal referral of patients to services outside of health in voluntary and community settings. Formal social prescribing services do not currently exist in this area. However, it is hoped that through audit and research a business case can be made to commission such a service.

Where these services do exist, health professionals refer to a social prescribing facilitator, who has strong community knowledge and links and is able to facilitate access to support networks, organisations and groups. (like Victoria Orah – for those around long enough to remember her!) If commissioned, this initiative will hopefully be helpful to patients and reduce the tendency toward medicalising social problems.

#### When might social prescribing be useful?

The following circumstances might be a sign that social prescribing could be indicated

- A medical solution or intervention is unlikely to prove to be successful or satisfactory
- A social intervention could be more appropriate
- The patient appears to need alternative ways to channel their energies
- The patient could benefit from talking to a person with strong links to the community and access real opportunities for change
- When empowering a patient to actively solve their own difficulties seems appropriate

Below are three stories of people with presentations you might recognise from your own experience. They provide examples, although are not hard and fast rules about some of the issues that might indicate referral to a social prescribing facilitator.

1. *Steven is 26 and lives at his parent's house. He went to university straight after school but did not take the course seriously and left with a 2.2 in computer studies. He dabbled in drugs but never developed a serious habit as far as you know. He started his own computer business but this failed – he said because his customers didn't pay up. He hasn't had a job for more than a few weeks in the past 3 years. He has one male friend who lives in Wales. He has been slightly better since on anti-depressants but still spends much of his time in bed. Relationships at home are strained and both parents have stress related problems for which they attend the surgery. His father says he is very bright. He has seen a psychologist and a counsellor but neither was helpful.*
2. *Elizabeth is 51 and lives with her daughter (who is separated from her husband). Elizabeth herself has been divorced for many years. In the past she has had several episodes of depression and anxiety. She took an overdose 15 years ago (around the time of her own separation). She is a frequent attender at the surgery. This is for a mixture of physical symptoms (mostly related to IBS, low back pain and thyroid disease) and anxiety symptoms (panic attacks) with prominent health anxiety. She has had numerous referrals to secondary care for consultations and diagnostics. Her daughter has revealed that she feels trapped at home by her mother.*
3. *Joyce is 84 and lives alone since the death of her husband in 2001. She has paroxysmal AF and cites this as the reason for not going out. She regularly asks for home visits for a variety of problems including UTIs, palpitations, abdominal pains. She talks so much it is difficult to get away. She has a son who lives in York and a daughter in Cornwall.*

#### What are we asking you to do?

##### How to collect data for the prevalence audit

- At each session over the period of one week participating clinicians (doctors, nurses, physio, counsellor) will record the identification number of patients they would consider referring to a social prescribing service if one were available. No other data collection is required by clinicians.

- Practice managers will collect this data after each session and also identify how many patients in total were seen at that session. We will then be able to estimate prevalence in % patients seen.
- Practice managers will note how many sessions were conducted over the period of one week and if any sessions did not collect data.

#### **Developing guidelines for referral to a social prescribing service**

- The research team have already identified possible indicators that might suggest social prescribing could be an appropriate intervention for an individual patient.
- Patient identification data collected as above will be used to check these indicators against your patient case histories.
- William House (with your permission) would like to visit your surgery to compare the identified patient case notes to these criteria in order to create a social prescription referral guidance for future use.

## Social Prescribing Prevalence Audit

The following circumstances might be a sign that social prescribing could be indicated

- |               |   |
|---------------|---|
| and / or .... | A medical solution or intervention is unlikely to be successful or satisfactory   |
| and / or .... | a social intervention could be more appropriate   |
| and / or .... | the patient appears to need alternative ways to channel their energies  |
| and / or .... | the patient could benefit from talking to a person with strong links to the community and access to real opportunities for change |
| and / or .... | when empowering a patient to actively solve their own difficulties through involvement with others seems appropriate              |

AND You think the patient might be prepared to give seeing a social prescriber a try.

**Please try to enter all patients who might be suitable for social prescribing: we most want to know how many there may be.**

Week for data collection ..... to .....

[illegible]

Please return completed proformas to Dr W House at St Augustine's Surgery

JB/WH Feb 08

**Appendix c** Audit persons identified as suitable for social prescription during GP surgeries - raw data  
(Indicators based on characteristics of a group identified from a search of high users of secondary care services)

|    |  | Surgery 1 |    |    |    |    |    | Surgery 2 |    |    | Surgery 3 |    |    |    |    |    |    |    |    |    |
|----|--|-----------|----|----|----|----|----|-----------|----|----|-----------|----|----|----|----|----|----|----|----|----|
|    | Indication                                     | 1         | 2  | 3  | 4  | 5  | 6  | 7         | 8  | 9  | 10        | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|    | Gender   | M         | F  | M  | F  | F  | F  | M         | M  | M  | F         | F  | F  | F  | F  | M  | F  | F  | F  | F  |
|    | Age  | 74        | 48 | 33 | 77 | 34 | 48 | 60        | 88 | 54 | 36        | 53 | 75 | 19 | 47 | 78 | 65 | 47 | 71 | 35 |
|    | <b>Strong indicators</b>                       |           |    |    |    |    |    |           |    |    |           |    |    |    |    |    |    |    |    |    |
| 1  | Vague diagnosis                                |           |    | √  | √  | √  |    |           |    |    |           |    |    | √  | √  | √  |    | √  |    |    |
| 2  | Freq attend (GP attendances in past 12 months) | 8         | 9  | 10 | 4  | 4  | 8  | 7         | 4  | 6  | 29        | 27 | 22 | 11 | 5  | 10 | 26 | 44 | 18 | 14 |
| 3  | Social poverty                                 | √         | √  |    |    |    | √  |           |    |    | √         |    | √  | √  |    |    | √  |    | √  |    |
| 4  | Multiple symptoms                              |           |    |    | √  |    |    |           |    |    |           |    |    |    |    |    |    | √  |    |    |
| 5  | Mental health problems                         | √         | √  | √  |    | √  | √  | √         | √  | √  | √         | √  | √  | √  | √  |    | √  | √  | √  | √  |
|    | <b>Medium indicators</b>                       |           |    |    |    |    |    |           |    |    |           |    |    |    |    |    |    |    |    |    |
| 6  | 3+ refs to 2ary care in 12m                    |           |    |    |    |    |    | √         |    |    |           |    |    |    |    |    |    |    |    | √  |
| 7  | Somatic focus                                  |           |    | √  | √  |    |    |           |    |    |           |    |    |    |    |    |    |    |    |    |
| 8  | Dissatisfied re care in 2ary                   |           |    |    |    |    |    |           |    |    |           |    |    |    |    |    |    |    |    |    |
| 9  | Poor results of treatments                     |           | √  |    |    | √  |    |           |    |    |           |    |    |    |    |    |    |    |    |    |
| 10 | Recurrent revision of scripts                  |           | √  |    |    |    |    | √         |    |    |           |    |    |    |    |    |    |    |    |    |
|    | <b>Weak indications</b>                        |           |    |    |    |    |    |           |    |    |           |    |    |    |    |    |    |    |    |    |
| 11 | Several chronic illnesses 2+                   | √         |    |    | √  |    |    | √         | √  | √  |           | √  | √  |    |    | √  | √  | √  | √  |    |
| 12 | Repeated visits A&E 3+ in 12m                  |           |    | √  |    |    |    |           |    |    |           |    |    |    |    |    |    |    |    |    |
| 13 | Obsessional personality                        |           |    |    | √  |    |    |           |    |    |           |    |    |    |    |    |    |    |    |    |
| 14 | Physical disability                            |           |    |    |    |    |    | √         |    | √  |           |    |    |    |    |    |    |    | √  | √  |

## Appendix d

Markers amongst patients referred to secondary care for OPD or diagnostic procedures three or more times in 12 months- Surgery 1.

| Ref | age | M/F | Lives alone | History Mental illness | Vague diagnosis | Dr visits in 12mths | 2+ Chronic illnesses |
|-----|-----|-----|-------------|------------------------|-----------------|---------------------|----------------------|
| 1   | 53  | F   | unknown     | √                      | √               | 18                  |                      |
| 2   | 38  | F   |             |                        |                 | 6                   | √                    |
| 3   | 39  | F   | unknown     | √                      |                 | 6                   | √                    |
| 4   | 85  | F   | √           |                        |                 | 2                   | √                    |
| 5   | 60  | F   |             | √                      |                 | 3                   | √                    |
| 6   | 21  | F   |             | √                      |                 | 7                   |                      |
| 7   | 38  | F   |             | √                      |                 | 8                   |                      |
| 8   | 67  | F   |             | √                      |                 | 16                  | √                    |
| 9   | 77  | F   |             |                        |                 | 17                  | √                    |
| 10  | 68  | F   | √           | √                      |                 | 7                   | √                    |
| 11  | 52  | F   |             | √                      |                 | 15                  | √                    |
| 12  | 80  | F   | √           |                        |                 | ?                   | √                    |
| 13  | 48  | F   |             |                        |                 | 5                   | √                    |
| 14  | 50  | M   |             | √                      |                 | 4                   |                      |
| 15  | 82  | F   |             | √                      |                 | 10                  | √                    |
| 16  | 86  | F   | √           | √                      |                 | 18                  |                      |
| 17  | 75  | F   |             | √                      |                 | 12                  | √                    |
| 18  | 41  | F   | √           | √                      |                 | 4                   |                      |
| 19  | 70  | F   |             | √                      |                 | 3                   | √                    |
| 20  | 57  | F   |             | √                      |                 | 16                  | √                    |